

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:
File Information Unit
Crystal Plaza Three, Room 1D01
2021 South Clark Place
Arlington, VA
Telephone: (703) 308-2733

In re Application of

Application Number

08-721447

Filed

9-27-96

Paper No.

24

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. _____, page, _____ line _____,

United States Patent Number 6316403, column _____, line, _____ or

WIPO Pub. No. _____, page _____, line _____.

Related Information about Access to Pending Applications (37 CFR 1.14):

Direct access to pending applications is not available to the public but copies may be available and may be purchased from the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)), as follows:
For published applications that are still pending, a member of the public may obtain a copy of:

- the file contents;
- the pending application as originally filed; or
- any document in the file of the pending application.

For unpublished applications that are still pending:

- (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(a), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
 - the file contents;
 - the pending application as originally filed; or
 - any document in the file of the pending application.
- (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of:
 - the pending application as originally filed.

Signature

Typed or printed name

Registration Number, if applicable

703 415 0371

Telephone Number

Date

11-10-05

FOR PTO USE ONLY

Approved by:

(Initials)

Unit

File Information Unit



US006316403B1

24

(12) United States Patent
Pinsky et al.**(10) Patent No.: US 6,316,403 B1**
(45) Date of Patent: Nov. 13, 2001**(54) METHODS FOR TREATING AN ISCHEMIC DISORDER AND IMPROVING STROKE OUTCOME****(75) Inventors:** David J. Pinsky, Riverdale; David Stern, Great Neck, both of NY (US); Ann Marie Schmidt, Franklin Lakes; Eric A. Rose, Tenafly, both of NJ (US); E. Sander Connolly, New York; Robert A. Solomon, Palisades, both of NY (US); Charles J. Prestigiacomo, Teaneck, NJ (US)**(73) Assignee:** The Trustees of Columbia University in the City of New York, New York, NY (US)**(*) Notice:** Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.**(21) Appl. No.:** 09/269,426**(22) PCT Filed:** Sep. 25, 1997**(86) PCT No.:** PCT/US97/17229

§ 371 Date: Jun. 25, 1999

§ 102(e) Date: Jun. 25, 1999

(87) PCT Pub. No.: WO98/13058

PCT Pub. Date: Apr. 2, 1998

Related U.S. Application Data**(63)** Continuation-in-part of application No. 08/721,447, filed on Sep. 27, 1996, now abandoned.**(51) Int. Cl.⁷** **A61K 38/00****(52) U.S. Cl.** **514/2; 514/21****(58) Field of Search** **514/23, 20, 2, 514/21****(56) References Cited****U.S. PATENT DOCUMENTS**

4,711,848 12/1987 Insley et al. 435/91

FOREIGN PATENT DOCUMENTS

2141641 8/1995 (CA).

OTHER PUBLICATIONSTijburg, et al. (1990) Activation of the Coagulation Mechanism on Tumor Necrosis Factor-stimulated Cultured Endothelial Cells and Their Extracellular Matrix, *J. Biol. Chem.* 266:12067-12074.Benedict, C.R., et al., 1994, Endothelial-Dependent Procoagulant and Anticoagulant Mechanisms, *Texas Heart Institute Journal* 21:86-90.Benedict et al. (1991) Active site-blocked factor IXa prevents intravascular thrombus formation in the coronary vasculature without inhibiting extravascular coagulation in a canine thrombosis model, *J. Clin. Invest.* 88, 1760-1765.

Brandstetter et al. (PNAS 92:9796-800, 1995).

Bronner et al. (1995) Primary prevention of stroke, *New Eng. J. Med.* 333, 1392-1400.Brown and Piantadosi (1992) Recovery of energy metabolism in rat after carbon monoxide hypoxia, *J. Clin. Invest.* 89, 666-672.Carlos and Harlan (1994) Leukocyte-endothelial adhesion molecules, *Blood* 24, 2068-2101.Connolly et al. (1996) Cerebral protection in homozygous null ICAM-1 mice after middle cerebral artery occlusion, *J. Clin. Invest.* 97, 209-216.Connolly et al. (1996) Procedural and strain-related variables significantly affect outcome in a murine model of focal cerebral ischemia, *Neurosurgery* 38, 523-532.Dawson and Snyder (1994) Gases as biological messengers: nitric oxide and carbon monoxide in the brain, *J. Neurosci.* 14, 5147-5159.Fassbender et al. (1995) Circulating selectin- and immunoglobulin-type adhesion molecules in acute ischemic stroke, *Stroke* 26, 1361-1364.Holdright, D., et al., 1994, Comparison of the effect of heparin and aspirin versus aspirin alone on transient myocardial ischemia and in-hospital prognosis in patients with unstable angina *J. Am. Coll. Cardiol.* 24:39-45.Ishimaru et al. (1991) Effects of successive carbon monoxide exposures on delayed neuronal death in mice under the maintenance of normal body temperature, *Biochem. Biophys. Res. Commun.* 179, 836-840.Jerome et al. (1994) P-selectin and ICAM-1 dependent adherence reactions: role in the genesis of postischemic no-reflow, *Am. J. Physiol.* 266, H1316-H1321.Kim et al. (1995) Adhesive glycoproteins CD11a and CD18 are upregulated in the leukocytes from patients with ischemic stroke and transient ischemic attacks, *J. Neurol. Sci.* 128, 45-50.Kochanek and Hallenbeck (1992) Polymorphonuclear leukocytes and monocytes/macrophages in the pathogenesis of cerebral ischemia and stroke, *Stroke* 23, 1367-1379.Mayevsky et al. (1995) Multiparametric monitoring of the awake brain exposed to carbon monoxide, *J. Appl. Physiol.* 78, 1188-1196.Okada et al. (1994) P-selectin and intercellular adhesion molecule-1 expression after focal brain ischemia and reperfusion, *Stroke* 25, 202-211.

(List continued on next page.)

Primary Examiner—Elli Peselev**(74) Attorney, Agent, or Firm**—John P. White; Cooper & Dunham LLP**(57) ABSTRACT**

The present invention provides for a method of treating an ischemic disorder in a subject which comprises administering to the subject a pharmaceutically acceptable form of inactivated Factor IX in a sufficient amount over a sufficient period of time to inhibit coagulation so as to treat the ischemic disorder in the subject.

19 Claims, 60 Drawing Sheets